

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference JNR/PB60448	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/GB2005/000926	International filing date (<i>day/month/year</i>) 10/03/2005	(Earliest) Priority Date (<i>day/month/year</i>) 10/03/2004
Applicant GLAXO GROUP LIMITED		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 12 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☒ **Certain claims were found unsearchable** (See Box II).

3. ☒ **Unity of invention is lacking** (see Box III).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

- a. the figure of the **drawings** to be published with the abstract is Figure No. 3e

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

- b. ☐ none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB2005/000926

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 155-157
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos.: 155-157

Claims 155-157 are referring solely on the figures, and do not have any technical features as such. Therefore no meaningful search can be carried out for said claims (Article 6 PCT).

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-42,72-78

An inhaler with a closure having a restricting member for preventing unintentional actuation of the inhaler.

2. claims: 43-51,89-91

Inhaler with a housing an a closure with an extendible connector part.

3. claims: 52-61

An inhaler with a restricting member fastened to the canister unit.

4. claims: 62-70

An inhaler with a restricting member which is inserted between the dispensing member and the housing.

5. claim: 71

An inhaler with a restricting means which restricts movement between the dispensing member and the housing and prevents removal of the dispensing member from the housing.

6. claims: 79-88

An accessory for use with an inhaler, the accessory having a restricting member for preventing dispensing the dose when attached to the inhaler.

7. claims: 92-95

A connector for connecting an accessory to an inhaler, the connector having a restricting member.

8. claims: 96-133

A dispensing device with a housing and a closure comprising a cap and a feature for insuring correct orientation of the closure to the user and a closure with a cap having an extension for engaging a dispensing device and indicating incorrect orientation of the cap on the device..

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

9. claims: 134-154

A dust cap for a pMDI with a strap part, the cap being
slidable on the strap part.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB2005/000926

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61M15/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61M B65D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X ✓	US 3 622 053 A (JOHN V. RYDEN) 23 November 1971 (1971-11-23) column 3, line 20 - line 24; figure 2 abstract	✓ 1-6, 8-11, 13, 17, 26, 27, 32, 33, 72-78 22-24, 28, 30, 31
Y	WO 2004/001664 A (GLAXO GROUP LIMITED; BONNEY, STANLEY, GEORGE; BRAND, PETER, JOHN; GODF) 31 December 2003 (2003-12-31) cited in the application the whole document	✓ 22-24, 28, 30, 31
A ✓	US 3 927 806 A (MESHBERG ET AL) 23 December 1975 (1975-12-23) figure 2 ----- -/-	✓ 1, 34-42



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

° Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

9 June 2005

Date of mailing of the international search report

29. 08. 2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Valfort, C

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB2005/000926

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A ✓	US 3 429 310 A (MARTIN A. JAFFE ET AL) 25 February 1969 (1969-02-25) the whole document	1-42, 72-78
X ✓	GB 1 044 627 A (BENGER LABORATORIES LIMITED) 5 October 1966 (1966-10-05)	1-6, 8-13, 16-21, 26,27, 32, 72-81,84 85-91, 105
Y	the whole document	
X ✓	US 3 191 867 A (HELMS W. LEE) 29 June 1965 (1965-06-29)	43, 45-47, 50,51 89-91
Y	abstract; figures	
X ✓	GB 2 364 320 A (* BESPAC PLC) 23 January 2002 (2002-01-23) page 7, line 19; figures 1,2a-2c	43,48, 49,89,90 88
X ✓	US 5 899 200 A (MCNARY ET AL) 4 May 1999 (1999-05-04) figures	43 134-154
X ✓	DE 298 18 662 U1 (JOSEF WISCHERATH GMBH & CO. KG) 2 March 2000 (2000-03-02) abstract; figures	43,92-95
X ✓	US 4 940 051 A (LANKINEN ET AL) 10 July 1990 (1990-07-10) column 3, line 14 - line 19; figure 1	71
P,X ✓	WO 2004/064906 A (LANGFORD, STANLEY, C) 5 August 2004 (2004-08-05)	52,54, 56-58, 60,62, 69,70 53,55, 59,63-68
P,A	abstract; figures	
X ✓	US 4 641 644 A (ANDERSSON ET AL) 10 February 1987 (1987-02-10) abstract; figures	43,44,91
X ✓	WO 99/38555 A (GOLDSTEIN & LEWIN TECHNOLOGY GMBH; GOLDEMAN, RAUL; SCHWARZWALD, DETLE) 5 August 1999 (1999-08-05)	43,44,91
Y	page 8, line 8 - line 22; figures page 15, line 10 - line 18; figure 6	134-154
	----- -/--	

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB2005/000926

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	WO 2004/089782 A (S. C. JOHNSON & SON, INC; FURNER, PAUL, E; NELSON, CORY, J) 21 October 2004 (2004-10-21)	52,54, 57,58, 62,69,70
P,A	paragraph '0044! - paragraph '0047!; figures	53,55, 59,63-68
A	ANONYMOUS: "Canister retention feature for inhalation device" RESEARCH DISCLOSURE, KENNETH MASON PUBLICATIONS, WESTBOURNE, GB, vol. 370, no. 34, February 1995 (1995-02), XP007120212 ISSN: 0374-4353 the whole document	52-70
E	WO 2005/046774 A (ASTRAZENECA AB; BUNCE, MARTIN) 26 May 2005 (2005-05-26) abstract; figures	134-154
X	US 3 549 055 A (LAWRENCE O. GATLAND) 22 December 1970 (1970-12-22)	96-104, 106-112
Y	column 3, line 35 - line 40; figure 1	105
X	WO 91/06333 A (NOVO NORDISK A/S) 16 May 1991 (1991-05-16) abstract; figure 1	96,110, 112
X	US 3 826 413 A (WARREN W,GB) 30 July 1974 (1974-07-30) figure 1	96, 110-112
X	WO 97/06842 A (PHARMASOL LIMITED; OPPERMAN, NICHOLAS, RICHARD, JAMES) 27 February 1997 (1997-02-27)	52,54, 57,58,62
Y	page 5, last paragraph; figures 1,2,5 page 8, paragraph 1	85-87

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB2005/000926

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 3622053	A	23-11-1971	CA 948599 A1	04-06-1974
			CH 515157 A	15-11-1971
			DE 2060583 A1	16-06-1971
			DK 129392 B	07-10-1974
			FR 2073152 A5	24-09-1971
			GB 1333438 A	10-10-1973
			JP 49033050 B	04-09-1974
			NL 7017959 A	14-06-1971
WO 2004001664	A	31-12-2003	AU 2003278236 A1	06-01-2004
			BR 0311557 A	26-04-2005
			CA 2489554 A1	31-12-2003
			WO 2004001664 A1	31-12-2003
			EP 1516283 A1	23-03-2005
US 3927806	A	23-12-1975	NONE	
US 3429310	A	25-02-1969	NONE	
GB 1044627	A	05-10-1966	GB 1044626 A	05-10-1966
			GB 1045876 A	19-10-1966
			DE 1243825 B	06-07-1967
			DE 1250055 B	
			FR 1410970 A	17-09-1965
			US 3404681 A	08-10-1968
US 3191867	A	29-06-1965	NONE	
GB 2364320	A	23-01-2002	AU 6620501 A	21-01-2002
			CA 2414118 A1	17-01-2002
			EP 1296733 A1	02-04-2003
			GB 2364321 A ,B	23-01-2002
			WO 0204056 A1	17-01-2002
			JP 2004502503 T	29-01-2004
			US 2004089292 A1	13-05-2004
US 5899200	A	04-05-1999	GB 2294506 A	01-05-1996
			AU 2747295 A	15-05-1996
			DE 69502111 D1	20-05-1998
			DE 69502111 T2	06-08-1998
			EP 0787103 A1	06-08-1997
			WO 9612661 A1	02-05-1996
DE 29818662	U1	02-03-2000	NONE	
US 4940051	A	10-07-1990	FI 834816 A	29-06-1985
			AT 29966 T	15-10-1987
			AU 569774 B2	18-02-1988
			AU 3832485 A	12-07-1985
			DE 3466478 D1	05-11-1987
			DK 354285 A	02-08-1985
			EP 0167581 A1	15-01-1986
			WO 8502778 A1	04-07-1985
			JP 61500831 T	01-05-1986
			NO 853339 A ,B,	26-09-1985
WO 2004064906	A	05-08-2004	US 2004139964 A1	22-07-2004
			WO 2004064906 A1	05-08-2004

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB2005/000926

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4641644	A	10-02-1987	SE 433443 B	28-05-1984
			AT 12353 T	15-04-1985
			AU 550712 B2	10-04-1986
			AU 8818682 A	22-03-1984
			CA 1181643 A1	29-01-1985
			CY 1387 A	18-12-1987
			DE 3262782 D1	02-05-1985
			DK 409082 A	16-03-1983
			EP 0074937 A1	23-03-1983
			ES 274773 U	01-02-1984
			FI 823121 A ,B,	16-03-1983
			GR 77340 A1	11-09-1984
			HK 68687 A	02-10-1987
			IE 53135 B1	06-07-1988
			JP 1058992 B	14-12-1989
			JP 1573889 C	20-08-1990
			JP 58061756 A	12-04-1983
			MY 35986 A	31-12-1986
			NO 822608 A ,B,	16-03-1983
			NZ 201878 A	12-07-1985
			PH 19905 A	13-08-1986
			PT 75558 A ,B	01-10-1982
			SE 8105487 A	16-03-1983
			SG 46487 G	04-03-1988
			ZA 8204880 A	27-04-1983
WO 9938555	A	05-08-1999	DE 19825434 A1	05-08-1999
			AT 249854 T	15-10-2003
			AU 742962 B2	17-01-2002
			AU 2510599 A	16-08-1999
			BR 9814928 A	17-10-2000
			CA 2319026 A1	05-08-1999
			CN 1130234 C	10-12-2003
			WO 9938555 A1	05-08-1999
			DE 59809670 D1	23-10-2003
			DK 1051212 T3	20-10-2003
			EP 1051212 A1	15-11-2000
			ES 2207030 T3	16-05-2004
			HK 1034475 A1	06-02-2004
			HR 20000510 A1	28-02-2001
			HU 0100645 A2	28-06-2001
			IL 137556 A	31-08-2004
			JP 2002501791 T	22-01-2002
			NO 20003847 A	02-10-2000
			NZ 506050 A	25-10-2002
			PL 342031 A1	21-05-2001
			PT 1051212 T	31-12-2003
			SI 20363 A	30-04-2001
			SK 11182000 A3	12-02-2001
			TR 200002005 T2	21-11-2000
			US 6752147 B1	22-06-2004
			ZA 9900342 A	19-05-1999
WO 2004089782	A	21-10-2004	WO 2004089782 A2	21-10-2004
WO 2005046774	A	26-05-2005	WO 2005046774 A1	26-05-2005
US 3549055	A	22-12-1970	BE 717578 A	16-12-1968

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB2005/000926

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 3549055	A	DE 6608621 U	30-09-1971
		DK 117279 B	06-04-1970
		FR 1571859 A	20-06-1969
		GB 1188003 A	15-04-1970
		SE 341788 B	17-01-1972
WO 9106333	A 16-05-1991	AT 109667 T	15-08-1994
		AU 6617390 A	31-05-1991
		CN 1051304 A ,C	15-05-1991
		DE 69011528 D1	15-09-1994
		DE 69011528 T2	01-12-1994
		WO 9106333 A1	16-05-1991
		DK 499613 T3	02-01-1995
		EP 0499613 A1	26-08-1992
		ES 2058937 T3	01-11-1994
		HR 930363 A1	30-06-1996
		IE 903918 A1	08-05-1991
		IL 96195 A	26-08-1994
		JP 2856549 B2	10-02-1999
		JP 5501370 T	18-03-1993
		NZ 235917 A	28-04-1993
		PL 287574 A1	13-01-1992
		PT 95764 A ,B	30-06-1993
		RU 2091088 C1	27-09-1997
		US 5542411 A	06-08-1996
		ZA 9008598 A	31-07-1991
US 3826413	A 30-07-1974	GB 1392192 A	30-04-1975
		AR 193533 A1	30-04-1973
		AT 335047 B	25-02-1977
		AT 604272 A	15-06-1976
		AU 4469672 A	24-01-1974
		BE 786421 A1	16-11-1972
		CA 961458 A1	21-01-1975
		CH 555681 A	15-11-1974
		CS 164928 B2	28-11-1975
		DE 2235247 A1	01-02-1973
		DK 136018 B	01-08-1977
		EG 10691 A	30-04-1976
		ES 404952 A1	16-06-1975
		FR 2146261 A1	02-03-1973
		HU 168483 B	28-05-1976
		IE 36534 B1	24-11-1976
		IL 39916 A	29-11-1974
		IT 965914 B	11-02-1974
		NL 7209897 A	23-01-1973
		NO 134730 B	30-08-1976
		NO 134730 A	
		PH 9864 A	11-05-1976
		PL 85732 B1	30-04-1976
		SE 383101 B	01-03-1976
		ZA 7204383 A	27-02-1974
WO 9706842	A 27-02-1997	AU 707525 B2	15-07-1999
		AU 6750396 A	12-03-1997
		CA 2229666 A1	27-02-1997
		CN 1193283 A	16-09-1998
		EP 0846011 A1	10-06-1998

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB2005/000926

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9706842	A	WO 9706842 A1	27-02-1997
		GB 2319485 A ,B	27-05-1998
		JP 11514254 T	07-12-1999
		US 6145703 A	14-11-2000
<hr/>			